
Analysis on Current Situation of the Central Business District Decline in Uto City

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ABSTRACT

This study presents an insight into the urban decline of the central district of Uto City. A transformation in the urban structure and effects of large scaled stores on the central shopping district were investigated. The questionnaire survey was conducted to obtain opinions of shop owners on the current circumstance, their expectations, and possible measures to enhance the attractiveness of the city central shopping area. Change in business situation and affecting factors were analyzed for seven blocks as structural components of the district. It has been found that in addition to the opening of the two large-scale stores near the central area, two new bypass roads opened near the ends of the shopping district might lead to an increasing number of closed and vacant shops in the central shopping district of Uto City.

Keywords: Large-Scale Retail Stores, Questionnaire survey, Closed shops, Central shopping street

INTRODUCTION

Urban decline has caused many difficulties in planning and economy management in many cities of Japan. Besides that, the dramatically transformation from commercial ventures by individual stores to the large-scale sales system has made business in shopping streets in the downtown areas increasingly difficult. Since this situation has continuously lasted for years and was considered one of the reasons for urban decline in Japan. To promote the sound development of a retail business and preserve the living environment of the surrounding area, “Act on the Measures by Large-Scale Retail Stores for Preservation of Living Environment” was issued in 1998 [1]. The act provides guidelines relating to the location of a large-scale retail store, layout and operational method of the facilities by a person establishing the large-scale retail stores. However, the actual situation shows that this act has not been effectively help to preserve the prosperity of the downtown shopping streets in Japan [2-4].

In order to assess this problem, a study on urban decline based on the Huff and Gravity model were conducted in Uto City, Japan from 2000 to 2014 [5]. The results showed that, due to an operation of the new built two large scaled stores (abbreviate as P store and U store), the center of the central shopping area is no longer located in the shopping street of the city but shifted about several meters to the side of U store in southeast area. The survey result also determined negative impacts of large-scaled stores on commercial activities in the downtown shopping streets.

The present study is aimed to assess the causes of the central business district decline in Uto City as reference for urban managers and policy maker to propose effective measures that help to revitalize the area. By dividing this area into seven blocks, the survey data was analyzed over time periods and by blocks.

STUDY METHODS

Survey Site

Uto is a city located in Kumamoto Prefecture, Japan. As of March 2000, the city has a population of 37,730 containing 18,112 men and 19,613 women in the total area of 74.17 km². As of May 2014, the

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total population is 38,010 including 18,238 men and 19,772 women. In other words, male populations had increased 1.007 times, while female populations had increased 1.008 times as many as in 2000.

However, the population living in Uto City central business district with a total area of 250 ha, as of March 2000, is 7,048 including 3,349 men and 3,699 women. The population density is 28 people/ha. According to the census of May 2014, the number of male and female population living in the business central district is 5,257 and 5,878, respectively, in the total population of 11,257. Male population increased 1.57 times, while female population increased 1.59 times as many as in 2000. Population density had reached 44.5 people/ha. It could be said that the population of the city central district had remarkably grown in compared with that of the entire Uto City.

In 1987, the first large-scale retail store with the area of 2,656 m² was opened in the North West of Uto city central area, while the second one with 42,321 m² area in the South East was first launched 8 years later. Figure 1 shows location of the center of Uto City. The city center is located in the area bounded by a dotted line with the total area of about 250 ha. The green line is the position of shopping street and two red circles indicate the two large-scale stores.



Figure1. Location the central shopping streets of Uto City (green lines) and the two large-scale stores (red circles)

In this study, the central shopping district of Uto City was divided into 7 blocks, numbered from 1 to 7 as shown in Figure 2. The shopping street was divided based on units of administrative management. The division and boundaries of the seven blocks is shown in Figure 3. These seven blocks and their surrounding 6 residential areas of Uto City were selected to investigate the trend of customer behaviors and numbers and distribution of closed shops. The investigation areas were distributed evenly in the central area of Uto City.

Questionnaire Survey on Trend of Consumer Behaviors

In order to investigate a shopping situation in central shopping areas of Uto City, the survey on the trend of consumer behaviors was conducted in January 2001. The questionnaire includes questions about the consumers' opinions on their preference of shopping places and the products they would buy at a certain place (Table 1). A total of 1704 questionnaire sheets were distributed randomly by mail to various residents living in 6 districts (A1-A6) and 7 blocks in the central area of Uto city as shown in Figure 2.



Figure2. Location of seven blocks and districts (A1-A6) used in the analysis

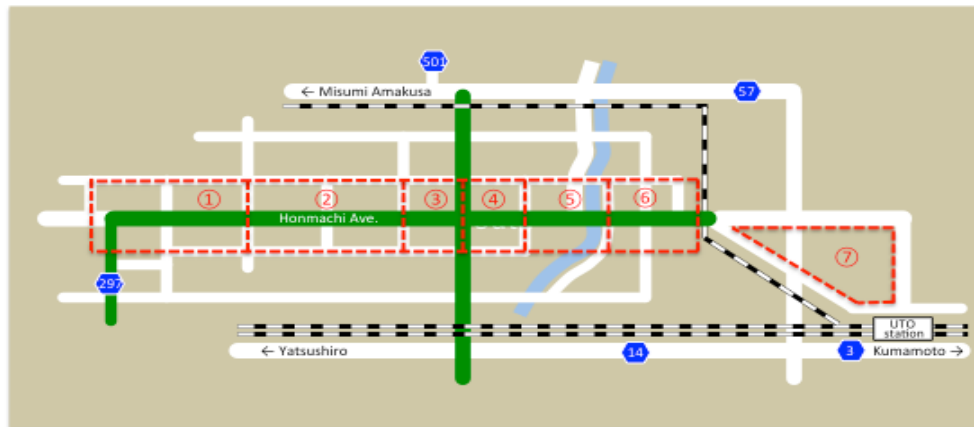


Figure3. Division and boundaries of seven blocks

Table1. Questionnaire items

Question No.	Contents
Item 1	What products do you often buy in the central shopping streets?
Item 2	What products do you often buy at P Shop?
Item 3	What products do you often buy at U shop?
Item 4	What products do you buy in the other shops?

Survey on the Closed Shops from 1987 to 2014

Before the operation of the two large-scale stores, about 157 stores in the central shopping area have been opened and went on business prosperously. However, number of customers who leave the central shopping area increased over time after the appearance of these stores. In order to clarify this phenomenon, an investigation was conducted based on the database provided by the Commerce Chamber of Uto City. By analyzing these data, the number of shops operated in the central shopping street of Uto City from 1987 to 2014 is considered.

A Questionnaire Survey Regarding the Business Situation and Causes of Increasing Numbers of Closed Shop

The next survey was aimed to find out possible measures to revitalize the business of the city central area and to investigate the current situation of closing stores in the shopping district of Uto City. The survey was conducted from December 18 to December 27, 2014. The store owners in 7 blocks of the

shopping district of Uto City were interviewed in form of face-to-face method. The interview content included queries relating to evaluations on the current situations of the shopping district and appropriate solutions that could help to revitalize the attractiveness of the district (Table 2).

Table2. Interview content

Question No.	Contents
Category (A)	Compare the current trend with those of time period of 5 to 10 years ago
Item 1	Whether there has been an increase or decrease in sales volumes
Item 2	The business profit margins have increased or decreased
Item 3	The number of customers have increased or decreased
Item 4	Whether or not there is competition with the two large-scale stores
Item 5	The number of available parking spaces
Item 6	An ability to retain employees
Item 7	Opinions on management know-how
Item 8	Reduction of distribution costs
Item 9	Whether or not there is a successor
Item 10	Ability to afford renovations to the store
Category (B)	Reason for closing a business of the store
Item 1	There was no parking space
Item 2	Decrease in the number of shopping visitors due to the opening of the bypass road
Item 3	Do not have a successor
Item 4	Other reasons
Category (C)	What do you find necessary to create an attractive shopping street
Item 1	Restaurant, cafe, fresh grocery store, grocery store, clothing store, quarter, resting space
Item 2	Public toilets, public parking, undergrounded electric wires, fast food restaurants
Item 3	Public space for organizing events
Item 4	The current number of shops is enough.

RESULTS

Result of the Questionnaire Survey on Trend of Consumer Behaviors

Among total of 1,704 questionnaire sheets delivered to the residents living in 7 blocks in the central shopping district and 6 areas of Uto City, 753 of them were returned, resulting in the response rate of 44.1% (Table 3). The demographic data shows that about two thirds of the respondents were female and one third of all survey respondents aged 60s and older (Table 4). The obtained data was processed by text mining method. All the goods the respondents mentioned in their answers were divided into three groups including fresh food, clothes and others. The stores where the respondents bought those goods were also summarized. The analysis results were shown in Figure 4. As indicated in Figure 4, about from 73.7% to 78.1% people in Uto city chose large-scale stores as places to buy daily stuffs. It is worth noting that the two large-scale stores apparently dominate over 100 stores in the city central areas.

Table3. Outline of the questionnaire survey on trend of consumer behaviors

Area	Number of respondents	Percentage (%)
1 to 7 blocks	288	38.2
(A1) Irichi Ichirigi machi	157	20.8
(A2) Kojomachi	75	10.0
(A3) Takayanagi Sakae machi	37	4.9
(A4) Kitadanbara machi	45	6.0
(A5) Minamidanbara Asahi machi	69	9.2
(A6) Matsuwara Sajiccho	77	10.2
Non-Response	5	0.7
Total	753	100.0

Table4. Demographic attributes of respondents to the questionnaire on trends of consumer behaviors

Categories		Number of respondents	Percentage (%)
Sex	Female	463	61.4
	Male	279	37.1
	Not answered	11	1.5
Ages	20s	75	10.0
	30s	126	16.7
	40s	145	19.3
	50s	136	18.1
	60s and over	264	35.0
	Not answered	7	0.9

The results of the survey on shopping trends of residents of Uto city in 2001 showed that about from 73.7% to 78.1% residents of Uto City prefer the two large-scale stores as places for daily shopping activities. This result indicated the trend that the two large-scale stores dominate the central shopping street in attracting their customers [5].

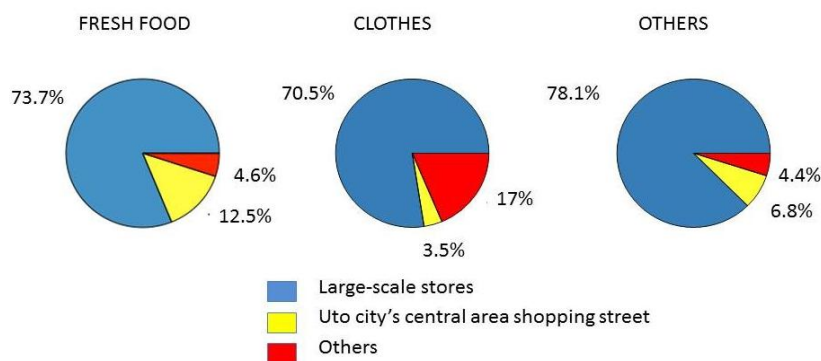


Figure4. Result of the survey on the consumer store preferences

Results of the Survey on the Number of Closed Shops in the Central Shopping Street from 1987 to 2014

According to the database provided by Uto City Commerce Chamber, the number of shops operated in the central shopping street of Uto City from 1987 to 2014 is shown in Table 5. Before the operation of the two large-scale stores, about 157 stores in the central shopping area had been opened and went on business prosperously. However, after the appearance of these stores, number of customers who leave the central shopping area increased over time. Regardless of the implementation of the Act on the Measures by Large-Scale Retail Stores for Preservation of Living Environment, the potential of central shopping area's revival was still very small. As a result, number of store in city central area now has decreased to 104, with downturn business circumstance.

Table5. Increase in the number of store closure from 1987 to 2014

Survey years	Total number of shop	Number of vacant shops	Store Closure Rate	Changing business or Failure
1987	157	4	2.5%	
1993	151	3	2.0%	6 shops
1997	148	22	15.0%	3 shops
2001	148	33	22.5%	
2003	124	12	9.7%	24 shops
2009	118	16	13.6%	6 shops
2014	104	11	10.6%	14 shops
Total			Total number of closed down shops	53/157
			Total rate	33.8%

Around 1987s, about 157 stores in the central shopping area of Uto city had been opened and went on business prosperously. However, after two large-scale stores opened in 1987 and 1995, percentage of vacant store increased year after year. The rate jumped from 15.0% in 1997 to 22.5% in 2001. The number of shops closed down is 53 until 2014, occupying 33.8% in the total number of shops operated in the shopping district.

In the next step of this study, the number and distribution of closed shop in the central shopping street was investigated at seven blocks. The analysis result is shown in Figure 5. The green column shows the total shop number and the red one is the number of changing business or failure shop. Closing rates at Blocks 7, 1 and 2 are highest among all the blocks. Regarding the possible reasons for the high closing rate at Block 7 (60%), the opening of a new road connecting Highway 57 and Uto City Station decreased the number of vehicles going through a street crossing Block 7 (Figure 6). This change indirectly made the number of customers visiting stores of Block 7 decrease and negatively affected the trade in this area. Closing rate reached 41% and 37% at Blocks 1 and 2, respectively. Similar to the situation at Block 7, the using of a part of the circulating road opened in 1997 might influence the traffic flow going through these areas. The lowest closing rate was observed at Block 6, which is only 14%. This could be explained by the fact that the opening of the new road connecting Uto City Station and Highway 57 made Block 6 more accessible and convenient than ever before.

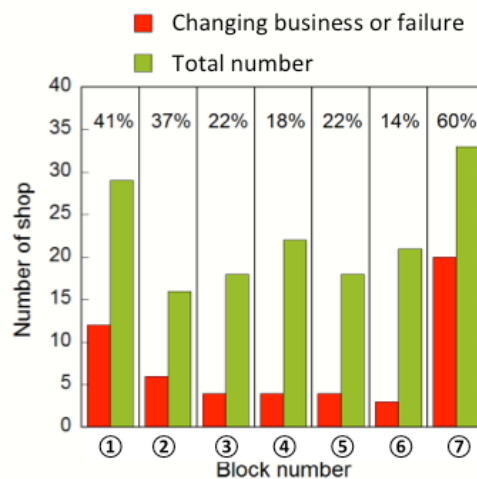


Figure5. Number of closed shop in block 1 to block 7

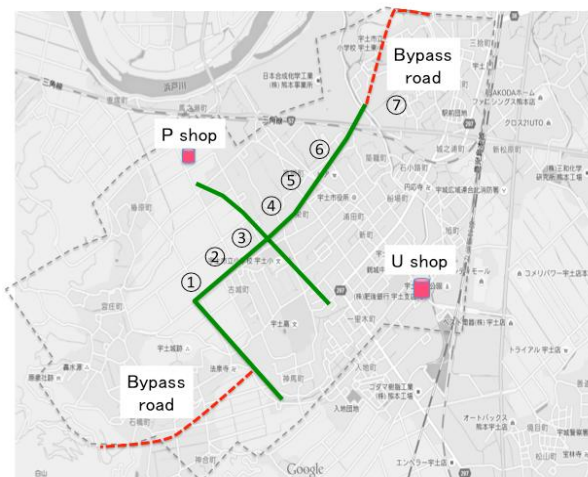


Figure6. Locations of newly opened bypass roads

However, the results of this study suggested that the increase closing rate of the central shopping street in Uto City was not only caused by the preference of residents with the two new large-scale stores but also the opening of the bypass roads around the area. In addition, the blocks in the middle of the street seem to be less affected than those located at the two ends of the street.

Results of the Questionnaire Survey Regarding the Business Situation and Reason of Closing Stores

The business situation of the central shopping district was analyzed based on data of 57 stores with the total area of 9,690m². The average area of each store is 170m². Among a total of 57 shop owners, there is 14 male respondents (24.6%), and 43 female respondents (75.4%). The age distribution of the respondents was shown in Table 6.

The main reasons for closing shops were summarized in Table 7. It was found that the decline of sale volumes and number of customers under the impacts of large scale stores and new opened bypass road and inability to find a successor led to the decision of closing business by the store owners.

The distribution of the opinions of the shop owners regarding business situation was shown in Figure 7. According to the shop owners, main difficulties they encountered in business were lack of funds to upgrade stores (44%), difficulty in retaining staffs (42%), difficulty in selecting goods supplying source choice (21%), having no inheritor (16%). Parking areas are shown to be in high demand with 68% opinions. Regarding whether or not there is competition with the large-scale stores, the agreement percent is 37% while only 14% said they do not have to compete with the large-scale stores. The survey found that only 5% of the shop owners were positive about the increase of the number of customers while 47% of the shop owners believed that this number will decrease. The number of shop owners being pessimistic about the business profit is 72%. Only 4% shop owners is positive about the increase in total amount of sale while 39% predicted that it would decrease. The survey results of opinions on possible measures to revitalize the attractiveness of the central district will be described in the following research paper.

Table6. Demographic attributes of respondents of the questionnaire regarding the business environment and reason for store closure

Categories		Number of respondents	Percentage (%)
Sex	Female	43	75.4
	Male	14	24.6
Ages	20s	3	5.3
	30s	2	3.5
	40s	11	19.3
	50s	17	29.8
	60s and over	24	42.1

Table7. Reasons for store closure

Reasons	Categories	Number of respondents	Percentage (%)
Decline of sales volume	Due to the impact of large scale stores	7	8.9
	Due to the impact of the bypass road	18	8.7
	There is no parking space	8	1.6
	There is no successor	4	0.8
	Total	37	100

CONCLUSIONS

Although the population living in the central district had increased significantly in the past 14 years, from 2000 to 2014, the business situation of the district showed signs of decline. This study provided an insight into the possible causes of the business decline of the central shopping district of Uto City. The results of this study could be summarized as follows:

- (1) The large-scaled stores negatively affected the commercial activities in the downtown business district of Uto City.
- (2) Lack of funds to upgrade and renovate stores was the most frequent mentioned difficulty that the shop owner in the central shopping district of Uto City encountered in their business.
- (3) The percentage of respondents having negative attitude to the prosperity of the business in the district was much higher than those having positive opinions.

Feasible solutions which would enhance the competitiveness of the central business district will be proposed in a further stage of this study through assessing the actual situations and considering applicable measures that are suitable to the current changing status of the district.

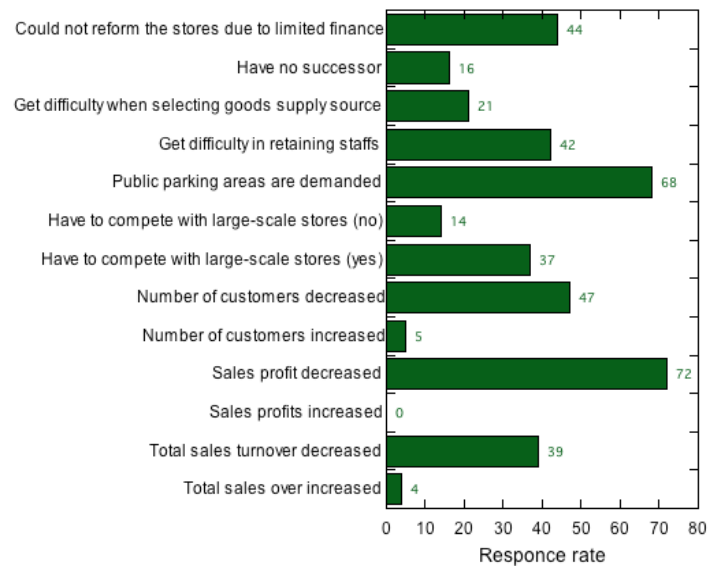


Figure7. Distribution of the opinions of the shop owners regarding business situation of the central shopping street

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